

Material Safety Data Sheet Copper(I) chloride

MSDS# 05720

# Section 1 - Chemical Product and Company Identification

MSDS

Copper(I) chloride

Catalog Numbers:

Name:

AC199640000, AC199640025, AC199640250, AC199645000, AC208390000, AC208390250 AC208390250, AC208391000, AC212420000, AC212420100, AC270520000, AC270520010

AC270520010, AC270525000, AC405870000, AC405871000, AC405875000, C457-500

Synonyms:

Cuprous chloride.

Company Identification:

Fisher Scientific
One Reagent Lane

Fair Lawn, NJ 07410

For information in the US, call: Emergency Number US: 201-796-7100 201-796-7100

CHEMTREC Phone Number, US:

800-424-9300

Section 2 - Composition, Information on Ingredients

\_\_\_\_\_

CAS#: 7758-89-6

Chemical Name: Copper(I) chloride

%: 90+

EINECS#: 231-842-9

\_\_\_\_\_

Hazard Symbols:

XN N



Risk Phrases:



22 50/53

Section 3 - Hazards Identification

#### **EMERGENCY OVERVIEW**

Warning! Harmful if swallowed. May cause eye, skin, and respiratory tract irritation. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Target Organs: Kidneys, liver.

Potential Health Effects

Eye: Exposure to solid may cause pain and redness.

Skin: May cause skin irritation. May be harmful if absorbed through the skin.

Ingestion: Harmful if swallowed. May cause irritation of the digestive tract.

Inhalation: May cause respiratory tract irritation. May be harmful if inhaled.

Chronic: May cause liver and kidney damage.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower

eyelids. Get medical aid.

Skin: Get medical aid. Immediately flush skin with plenty of water for at least 15 minutes while removing

contaminated clothing and shoes.

Ingestion: Do not induce vomiting. Get medical aid immediately. Call a poison control center.

Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Get medical aid. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial

Inhalation:

respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical

device.

Notes to Physician:

Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Use extinguishing media appropriate to the

surrounding fire. Substance is noncombustible.

Extinguishing Media:

Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

Autoignition Not applicable.

Temperature:

Flash Point: Not applicable.

Explosion Limits: Not available Lower:

Explosion Limits: Upper: Not available

NFPA Rating: health: 2; flammability: 0; instability: 1;

Section 6 - Accidental Release Measures

General

Use proper personal protective equipment as indicated in Section 8.

Information:

Vacuum or sweep up material and place into a suitable disposal container. Wear a self contained breathing

Spills/Leaks:

apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section).

Avoid generating dusty conditions. Provide ventilation. Do not let this chemical enter the environment.

Section 7 - Handling and Storage

Handling:

Minimize dust generation and accumulation. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale.

Use and store under nitrogen. Use only in a chemical fume hood.

Storage:

Store in a cool, dry place. Store in a tightly closed container. Corrosives area. Store protected from light. Store

under nitrogen.

## Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Copper(I) chloride	none listed	1 mg/m3 TWA (dust   and mist, as Cu,   except copper   fume) (listed   under Copper   compounds,   n.o.s.).100 mg/m3   IDLH (dust and   mist, as Cu)   (listed under   Copper   compounds,   n.o.s.).	none listed

OSHA Vacated PELs: Copper(I) chloride: None listed

**Engineering Controls:** 

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use only under a chemical fume hood.

**Exposure Limits** 

Personal Protective Equipment

Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or

European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

## Section 9 - Physical and Chemical Properties

Physical State: Powder

Color: green - grey Odor: odorless

pH: Not available

Vapor Pressure: 1.3 mbar @ 546 deg C

Vapor Density: Not available Evaporation Rate: Not applicable. Viscosity: Not available

Boiling Point: 1490 deg C @ 760 mmHg ( 2,714.00°F)

Freezing/Melting Point: 430 deg C (806.00°F)

Decomposition Temperature: Not available Solubility in water: 0.06 g/L (25°C)

Specific Gravity/Density: 4.140 Molecular Formula: ClCu Molecular Weight: 99

Section 10 - Stability and Reactivity

Chemical Stability: Air sensitive. Moisture sensitive. Light sensitive.

Conditions to Avoid: Incompatible materials, light, dust generation, exposure to air, metals, excess heat,

exposure to moist air or water.

Incompatibilities with Other

Materials

Alkali metals, potassium.

Hazardous Decomposition

Products

Hydrogen chloride.

Hazardous Polymerization Will not occur.

Section 11 - Toxicological Information

RTECS#: CAS# 7758-89-6: GL6990000

RTECS:

CAS# 7758-89-6: Inhalation, mouse: LC50 = 1008 mg/m3;

LD50/LC50: Oral, mouse: LD50 = 347 mg/kg;

Oral, rat: LD50 = 140 mg/kg;

.

Carcinogenicity: Copper(I) chloride - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Other: Do not empty into drains.

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

**US DOT** 

Shipping Name: COPPER CHLORIDE

Hazard Class: 8 UN Number: UN2802 Packing Group: III Canada TDG

Shipping Name: COPPER CHLORIDE

Hazard Class: 8

UN Number: UN2802 Packing Group: III

## Section 15 - Regulatory Information

## European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XN N

Risk Phrases:

R 22 Harmful if swallowed.

R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases:

S 22 Do not breathe dust.

S 60 This material and its container must be disposed of as hazardous waste.

S 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

WGK (Water Danger/Protection)

CAS# 7758-89-6: 2

Canada

CAS# 7758-89-6 is listed on Canada's DSL List

Canadian WHMIS Classifications: E, D1B

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

CAS# 7758-89-6 is listed on Canada's Ingredient Disclosure List

US Federal

**TSCA** 

CAS# 7758-89-6 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: 2/19/1998 Revision #7 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

-----